Patent claims

1. An orthopedic aid with two parts (15, 16) which are movable relative to one another and with a locking device for locking the two parts (15, 16) in a predetermined relative position and for unlocking the parts (15, 16) in order to permit movement of the parts (15, 16) with respect to one another, wherein at least one signaling arrangement (36, 40, 41, 42) is provided which emits a particular indicator signal or warning signal for the locking state or upon unlocking of the locking device.

2. The orthopedic aid as claimed in claim 1, wherein at least one detection arrangement (30, 31) is provided for detecting the locking state of the two parts (15, 16) and for emitting a signal indicating the locking state.

3. The orthopedic aid as claimed in claim 1 or 2, wherein the signaling arrangement (36, 40, 41, 42) is designed to emit a signal upon unlocking.

4. The orthopedic aid as claimed in one of claims 1 through 3, wherein the signal is visual, acoustic, tactile and/or mechanical.

5. The orthopedic aid as claimed in one of claims 1 through 4, wherein the detection arrangement (30, 31) is designed to generate the signal electrically as a function of the locking state.

6. The orthopedic aid as claimed in one of claims 1 through 5, wherein the locking device has a movable locking pin (25) whose position can be detected by the detection arrangement (30, 31).

7. The orthopedic aid as claimed in one of claims 1 through 6, wherein the locking device is designed to be actuated electromechanically to permit unlocking.

8. The orthopedic aid as claimed in claims 6 and 7, wherein the locking pin (25) is arranged such that it can be drawn into a magnet coil (28) to permit unlocking.

9. The orthopedic aid as claimed in one of claims 5 through 8, wherein the detection arrangement (30, 31) is designed for electrical scanning of the position of the locking pin.

10. The orthopedic aid as claimed in one of claims 1 through 9, designed as an orthotic joint in which the parts (15, 16) of the joint (6) can be locked in an extended position, wherein an electromagnetic actuating arrangement (28) with a low actuating force of not more than 2 N is provided, and wherein the joint (6) in the extended position has a slight play, allowing a freedom of movement of the locking mechanism in the loading of the joint (6) pertaining to the extended position, whereas, in the event of a load exerting a turning moment of the joint (6), the locking mechanism cannot be unlocked by the actuating arrangement (28) on account of frictional forces.

11. The orthopedic aid as claimed in one of claims 1 through 10, wherein the locking device is actuated by wireless transmission of an actuating signal.

12. The orthopedic aid as claimed in claim 11, wherein an actuating signal for wireless transmission of the command signal can be triggered on a handgrip (12) of a walking aid (10).

13. The orthopedic aid as claimed in claim 11 or 12, wherein the signal of the signaling arrangement (36, 40, 41, 42) can be sent by wireless transmission to the walking aid (10).

14. The orthopedic aid as claimed in claim 13, wherein the walking aid (10) has a visual and/or acoustic signal display arrangement.

15. The orthopedic aid as claimed in claim 13 or 14, wherein a handgrip (12) of the walking aid (10) is provided with a vibrator that can be actuated by the signal.